, **LISTING OF CLAIMS**

This listing of clams will replace all prior versions and listings of claims in the application.

Claim 1 (Currently Amended): A medium whereon an image data interpolation program has been recorded to implement pixel interpolation to image data of an image represented in multi-tone dot matrix pixels on a computer, said medium with the image data interpolation program recorded thereon, after being set ready for use on a computer, making the computer perform:

a function of image data acquisition that acquires said image data;

a first interpolation processing function that interpolates pixels to said image data without decreasing the degree of tone value difference between the existing pixels;

a second interpolation processing function that interpolates pixels to said image data without affecting the gradation of the tones of the image; and

a ~~first~~ function of determining if ~~a blending ratio that appraises an attribute of~~ the image is a non-natural image or ~~that indicates a likelihood of the image to be~~ a natural image ~~picture~~, or that it can not be determined whether the image is either a natural image nor a non-natural image, based on ~~reference pixels around a pixel of target of~~ brightness data of said acquired image data, said determination that the image is a non-natural image resulting in said first interpolation processing function, said determination that the image is a natural image resulting in ~~and determines a blending ratio between pixel interpolations generated by said first interpolation processing and those generated by~~ said second interpolation processing function, and if the image data cannot be determined to be either said natural image or said non-natural image, both the first and second interpolation processing functions are performed

and results from the first and second interpolation processing functions are blended ~~based on~~

~~the appraised attribute;~~

~~a function of image data blending that blends the image data of interpolations~~

~~generated by said first interpolation processing function and the corresponding data generated~~

~~by said second interpolation processing function at the determined blending ratio; and~~

~~an image data output function that outputs the thus blended data as interpolation~~

~~processed image data.~~

Claim 2 (Currently Amended): The medium with the image data interpolation

program recorded thereon according to claim 1, wherein:

said first interpolation processing function is able to execute pattern matching

interpolation which is performed, according to a predetermined rule, when a given pattern

exists in ~~the~~ reference pixels, and nearest neighbor interpolation.

Claims 3-11 (Canceled).

Claim 12 (Currently Amended): An image data interpolation method interpolating

pixels to image data of an image represented in multi-tone dot matrix pixels comprising:

a step of image data acquisition that acquires said image data;

a first interpolation processing step that interpolates pixels to said image data without

decreasing the degree of tone value difference between the existing pixels;

a second interpolation processing step that interpolates pixels to said image data

without affecting the gradation of the tones of the image; <u>and</u>

a ~~first~~ step of determining <u>if</u> ~~a blending ratio that appraises an attribute of~~ the image <u>is</u>

<u>a non-natural image or</u> ~~that indicates a likelihood of the image to be~~ a natural <u>image</u> ~~picture,~~

or that it cannot be determined whether the image is either a natural image nor a non-natural image, based on ~~reference pixels around a pixel of target of~~ brightness data of said acquired image data, said determining that the image is a non-natural image resulting in said first interpolation processing, said determining that the image is a natural image resulting in ~~and determines a blending ratio between pixel interpolations generated by said first interpolation processing and those generated by~~ said second interpolation processing, and if the image data cannot be determined to be either said natural image or said non-natural image, performing both the first interpolation processing and the second interpolation processing and blending results from the first interpolation processing and the second interpolation processing ~~based on the appraised attribute;~~

~~a blending ratio that appraises an attribute of the image that indicates a likelihood of the image to be a natural picture, based on reference pixels around a pixel of target of interpolation and determines a blending ratio between pixel interpolations generated by said first interpolation processing and those generated by said second interpolation processing, based on the appraised attribute;~~

~~a step of image data blending that blends the image data of interpolations generated by said first interpolation processing step and the corresponding data generated by said second interpolation processing step at the determined blending ratio; and~~

~~an image data output step that outputs the thus-blended data as interpolation-processed image data.~~

Claim 13 (Currently Amended): The image data interpolation method according to claim 12, wherein:

said first interpolation processing step is able to execute pattern matching

interpolation which is performed, according to a predetermined rule, when a given pattern

exists in ~~the~~ reference pixels, and nearest neighbor interpolation.

Claims 14-22 (Canceled).

Claim 23 (Currently Amended): An image data interpolation apparatus for

interpolating pixels to image data of an image represented in multi-tone dot matrix pixels

comprising:

an image data acquisition unit that acquires said image data;

a first interpolation processing unit that interpolates pixels to said image data without

decreasing the degree of tone value difference between the existing pixels;

a second interpolation processing unit that interpolates pixels to said image data

without affecting the gradation of the tones of the image;

a first unit of determining <u>if</u> ~~a blending ratio that appraises an attribute of~~ the image <u>is</u>

<u>a non-natural image or</u> ~~that indicates a likelihood of the image to be~~ a natural <u>image</u> ~~picture~~,

<u>or that it cannot be determined whether the image is either a natural image nor a non-natural</u>

<u>image,</u> based on ~~reference pixels around a pixel of target of~~ <u>brightness data of said acquired</u>

<u>image data, said determining that the image is a non-natural image resulting in said first</u>

interpolation <u>processing, said determining that the image is a natural image resulting in</u> ~~and~~

~~determines a blending ratio between pixel interpolations generated by said first interpolation~~

~~processing and those generated by~~ said second interpolation processing, <u>and if the image data</u>

<u>cannot be determined to be either said natural image or said non-natural image, performing</u>

<u>both the first and second interpolation processing and blending results from the first</u>

interpolation processing and the second interpolation processing ~~based on the appraised~~

~~attribute;~~

~~an image data blending unit that blends the image data of interpolations generated by~~

~~said first interpolation processing step and the corresponding data generated by said second~~

~~interpolation processing step at the determined blending ratio; and~~

~~an image data output unit that outputs the thus blended data as interpolation-processed~~

~~image data.~~

Claim 24 (Currently Amended): The image data interpolation apparatus according to

claim 23, wherein:

said first interpolation processing unit is able to execute pattern matching

interpolation which is performed, according to a predetermined rule, when a given pattern

exists in ~~the~~ reference pixels, and nearest neighbor interpolation.

Claims 25- 33 (Cancelled).

Claim 34 (Previously Presented): The medium with the image interpolation program

recorded thereon according to Claim 2, wherein:

said pattern matching interpolation refers to pixels determined based on the given

pattern.